In the Claims

Amend the following claims:

1. (Amended) A positioner for moving an E-block and a data transducer of a disk drive relative to a storage disk, the E-block having a longitudinal axis, the positioner comprising:

a magnet assembly producing a magnetic field; and

a coil array that couples to the E-block and is positioned near the magnet assembly, the coil array being a generally D-shaped loop including a first segment that is positioned substantially perpendicular to the longitudinal axis of the E-block, the first segment being adapted to interact with the magnetic field to move the E-block relative to the storage disk.

13. (Amended) A head stack assembly for moving a data transducer of a disk drive relative to a target track of a storage disk, the head stack assembly comprising:

an E-block having a longitudinal axis;

a transducer assembly secured to the E-block, the transducer assembly including a data transducer;

a positioner including (i) a magnet assembly producing a magnetic field, (ii) a coil array secured to the E-block and positioned near the magnet assembly, the coil array being a generally D-shaped loop including a first segment positioned substantially perpendicular to the longitudinal axis, the first segment including (i) a first portion, and (ii) a second portion; and

a control system that directs current to the coil array to move the data transducer relative to the target track.

20. (Amended) A method for retrieving data from a target track on a rotating storage disk of a disk drive, the method comprising the steps of:

providing an E-block with a longitudinal axis;

securing a transducer assembly to the E-block, the transducer assembly including a data transducer;

providing a magnet assembly producing a magnetic field;

coupling a coil array to the E-block with the coil array being positioned near the magnet assembly, the coil array being a generally D-shaped loop including (i) a first portion; and (ii) a second portion, the first and second portions being perpendicular to the longitudinal axis, the first and second portions being positioned symmetrically about the longitudinal axis; and

directing current to the coil array to move the data transducer relative to the target track.

21. (Amended) The method of claim 20 wherein directing current to the coil array includes directing current to the first portion and the second portion to generate a first force and a second force, respectively, wherein the first force is substantially equal in magnitude and opposite in direction to the second force.

Add the following claims:

23. A positioner for moving a data transducer relative to a storage disk in a disk drive, the positioner comprising:

a magnetic assembly including an upper magnetic array and a lower magnetic array; and

a coil array between the magnetic arrays, wherein the coil array is a generally D-shaped loop.

24. The positioner of claim 23 wherein the coil array includes a first segment and a second segment, the first segment is substantially linear and the second segment forms an arc.

25. The positioner of claim 24 wherein the first segment is substantially perpendicular to a longitudinal axis of a head stack assembly that includes the data transducer.

26. The positioner of claim 25 wherein the second segment forms an arc that is centered at a pivot center of the head stack assembly.

27. The positioner of claim 25 wherein the first and second segments are positioned symmetrically about the longitudinal axis.

28. The positioner of claim 25 wherein the first segment includes a first portion, a second portion and a center portion therebetween, the first and second portions are positioned between the magnetic arrays, and the center portion is not positioned between the magnetic arrays.

29. The positioner of claim 23 wherein the magnetic arrays each include an inner side, an outer side, and a pair of side wings therebetween, the inner side faces towards the data transducer and forms an arc, and the outer side faces away from the data transducer.

30. The positioner of claim 29 wherein the inner side forms an arc that is centered at a pivot center for the data transducer.

31. The positioner of claim 29 wherein the inner and outer sides are curved with reverse concavity relative to one another.

32. The positioner of claim 29 wherein the coil array includes first and second segments and a pair of corners therebetween, and the corners are disposed on opposites sides of a longitudinal axis of a head stack assembly that includes the data transducer.

33. The positioner of claim 32 wherein the corners are substantially aligned with the wings in a direction perpendicular to the longitudinal axis.

34. The positioner of claim 32 wherein the corners are not substantially aligned with the wings in a direction parallel to the longitudinal axis.

35. The positioner of claim 23 wherein the magnetic arrays extend a first distance parallel to a longitudinal axis of a head stack assembly that includes the data transducer, the coil array extends a second distance parallel to the longitudinal axis, and the first distance is greater than the second distance.

36. The positioner of claim 23 wherein the magnetic arrays extend a first distance perpendicular to a longitudinal axis of a head stack assembly that includes the data transducer, the coil array extends a second distance perpendicular to the longitudinal axis, and the first and second distances are essentially identical.

37. A positioner for moving a data transducer relative to a storage disk in a disk drive, the positioner comprising:

a magnetic assembly including an upper magnetic array and a lower magnetic array;

a coil array between the magnetic arrays, wherein the coil array is a generally D-shaped loop of wire wrapped into a plurality of turns that includes a first segment and a second segment, the first segment is substantially linear and the second segment forms an arc; and

a control system that electrically excites the coil array to interact with a magnetic field of the magnetic assembly.

38. The positioner of claim 37 wherein the first segment includes a first portion, a second portion and a center portion therebetween, the first and second portions are positioned between the magnetic arrays, and the center portion is not positioned between the magnetic arrays.

39. The positioner of claim 37 wherein the magnetic arrays extend a first distance parallel to a longitudinal axis of a head stack assembly that includes the data transducer, the coil array extends a second distance parallel to the longitudinal axis, and the first distance is greater than the second distance.

40. The positioner of claim 37 wherein the magnetic arrays extend a first distance perpendicular to a longitudinal axis of a head stack assembly that includes the data transducer, the coil array extends a second distance perpendicular to the longitudinal axis, and the first and second distances are essentially identical.